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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ROBERT CRAGO, Individually and on Behalf of All Others Similarly Situated,

Plaintiff,

v.

CHARLES SCHWAB & CO., INC., and THE CHARLES SCHWAB CORPORATION,

Defendants.

Case No. 3:16-cv-03938-RS

SECOND AMENDED CLASS ACTION COMPLAINT FOR VIOLATIONS OF FEDERAL SECURITIES LAWS

DEMAND FOR JURY TRIAL

The Hon. Richard G. Seeborg

TABLE OF CONTENTS

Lead Plaintiffs Robert Wolfson and Frank Pino ("Lead Plaintiffs"), together with plaintiff K. Scott Posson (collectively, "Plaintiffs"), individually and on behalf of all other persons similarly situated, by their undersigned attorneys, for their Second Amended Class Action Complaint against defendants The Charles Schwab Corporation ("Schwab Corp.") and Charles Schwab & Co., Inc. ("Schwab & Co.") (together, "Schwab" or "Defendants"), allege the following based upon personal knowledge as to themselves and their own acts and information and belief as to all other matters based upon the investigation of their counsel, which included a review of Schwab's filings with the U.S. Securities and Exchange Commission ("SEC"), as well as other regulatory filings and reports, press releases, and other public statements issued by and about Schwab, various agreements between Schwab and its customers, and other publicly available reports and articles. Lead Plaintiffs believe that additional evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

I. PRELIMINARY STATEMENT

1. This is a securities class action on behalf of all Schwab brokerage customers between July 13, 2011 and December 31, 2014 (the "Class Period") who placed trade orders that were routed to UBS Securities LLC ("UBS") in a manner inconsistent with Schwab's duty of best execution. Plaintiffs bring their claims pursuant to Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act"), 15 U.S.C. §§ 78j (b), and SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 promulgated thereunder.

2. Schwab is one of the largest retail broker-dealers in the world. During the Class Period, Schwab routed its clients' trade orders to various exchanges or trading venues for execution. Schwab, like all broker-dealers, was subject to the duty of "best execution," pursuant to FINRA Rule 5310 ("Rule 5310"), which required Schwab to "use reasonable diligence to ascertain the best market . . . so that the resultant price to the customer is as favorable as possible." Similarly, in its September 6, 1996 Release No. 34-37619A Order Execution Obligations, the SEC stated that the duty of best execution is incorporated into the antifraud provisions of the federal securities laws and requires a broker "to seek the most favorable terms reasonably available under the circumstances for a customer's transactions."

3. Specifically Rule 5310 sets forth a non-exhaustive list of factors to be considered by brokers when routing order flow:

> In any transaction for or with a customer or a customer of another broker-dealer, a member and persons associated with a member shall use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions. Among the factors that will be considered in determining whether a member has used "reasonable diligence" are:
>
> (A) the character of the market for the security (*e.g.*, price, volatility, relative liquidity, and pressure on available communications);
>
> (B) the size and type of transaction;
>
> (C) the number of markets checked;
>
> (D) accessibility of the quotation; and
>
> (E) the terms and conditions of the order which result in the transaction, as communicated to the member and persons associated with the member.

4. Throughout the Class Period, Schwab recognized that it had the duty to seek best execution for its clients and stated that, in fact, it complied with its duty of best execution.

5. However, Schwab failed to disclose throughout the Class Period that its duty of best execution was materially undermined by a payment for order flow ("PFOF") pursuant to, among other things, the Equities Order Handling Agreement, effective October 29, 2004 ("Handling Agreement") it had with UBS, a wholesale market maker. Specifically, Schwab failed to disclose throughout the Class Period the following facts as they related to its duty of best execution:

a. Schwab mechanically routed more than of 95% of its retail trade orders to a single vendor, UBS;

b. UBS paid Schwab approximately $100 million per year for the right to receive Schwab's retail orders flow;

c. UBS disavowed any obligation to exercise the duty of best execution in implementing the orders Schwab sent to it, but instead agreed only to comply with certain minimum standards that were never disclosed to Schwab's clients; and

d. UBS profited from Schwab's retail order flow, and damaged Schwab's clients, by:

i. internalizing the trade, *i.e.*, matching the order internally without providing best execution by routing the transaction to a different venue with a better price, thereby depriving Schwab's clients of the better price;

ii. placing the trade in a UBS "dark pool,"[1] where high-frequency traders ("HFTs") would trade against Schwab's clients' orders preventing them from getting the most favorable better price; or

iii. rerouting the trade in a manner to maximize UBS's ability to obtain a liquidity rebate from a third party, resulting in Schwab's clients being harmed by inferior execution.

6. At all relevant times, Schwab failed to disclose that it prioritized adherence to the Handling Agreement with UBS over the factors relevant to a proper best execution analysis. Disclosure of Schwab's true order routing practices was necessary to make Schwab's assertions that it complied with the duty of best execution not misleading.

7. Defendants' own statements demonstrated that they were fully aware of their failure to disclose these material facts such that their clients would not have been misled.

8. Schwab's failure to disclose these material facts regarding its actual order routing practices caused Plaintiffs and the Class to sustain substantial harm in the form of, *inter alia*, higher prices for purchase orders, lower prices for sell orders, slower executions, lesser fill rates, and exposure to a greater risk of adverse selection, than could have been obtained using a broker that fulfilled its legal and regulatory duty to provide best execution.

[1] A dark pool is a private trading venue not available to public investors, used mostly by sophisticated, professional investors who are able to make trades anonymously.

II. JURISDICTION AND VENUE

9. The claims alleged herein arise under Sections 10(b) of the Exchange Act, 15 U.S.C. §§ 78j(b) , and Rule 10b-5, 17 C.F.R. § 240.10b-5 promulgated thereunder.

10. The jurisdiction of this Court is based on Section 27 of the Exchange Act, 15 U.S.C. § 78aa and 28 U.S.C. §§ 1331 and 1337.

11. Venue is proper in this District pursuant to Section 27 of the Exchange Act and 28 U.S.C. § 1391(b). Many of the acts alleged herein, including Schwab's dissemination to its public clients of statements with material omissions at issue, occurred in substantial part in this District.

12. In connection with the acts, transactions, and conduct alleged herein, Defendants used the means and instrumentalities of interstate commerce, including the United States mails, interstate telephone communications, and the facilities of national securities exchanges and markets.

III. PARTIES

13. Lead Plaintiffs Robert Wolfson and Frank Pino are Schwab retail brokerage clients and have been continuously throughout the Class Period. Lead Plaintiffs are individuals and residents of the States of New York and New Jersey, respectively. Lead Plaintiffs purchased and sold shares of U.S. exchange-listed stocks in trades placed with Defendants and executed during the Class Period and, as a result thereof, suffered damages from Defendants' unlawful conduct.

14. Plaintiff Scott Posson is a retail customer of Schwab, and was continuously throughout the Class Period. Plaintiff Posson is an individual who resides in the state of New York, and purchased and sold shares of U.S. exchange-listed stocks in non-directed trades placed with Defendants and executed during the Class Period and, as a result thereof, suffered damages from Defendants' unlawful conduct.

15. Defendant Schwab & Co. is a California corporation and a subsidiary of Schwab Corp. It was incorporated in 1971. Schwab & Co. is a securities broker-dealer with over 325 branch offices in 45 states, as well as branches in the Commonwealth of Puerto Rico and London.

16. Defendant Schwab Corp. is a Delaware corporation that was incorporated in 1986 and engages, through its subsidiaries, in wealth management, securities brokerage, banking, money management, and financial advisory services. Schwab Corp.'s principal executive offices are located at 211 Main Street, San Francisco, California.

IV. FACTUAL BACKGROUND

A. The Modern, Fragmented Market Structure and Order Routing Payments

17. Broker-dealers buy and sell stocks, bonds, and other securities for their clients and, sometimes, their own accounts. Broker-dealers receive orders from their clients and route these orders to various venues to be executed. While a client can specify that its broker route an order to a particular venue, the vast majority of retail orders are "non-directed," meaning that the broker may route it to any venue, provided that the broker adheres to the duty of best execution in selecting the venue. In addition to determining whether an order be directed to a certain venue, a retail client may give his broker different types of orders.

18. One such type of order, known as a "nonmarketable limit order," is an instruction from the client for the broker to deal in a certain number of securities at a specified price outside the current prevailing "ask" or "offer." There are also "marketable limit orders," instructions to deal in a certain number of securities inside the prevailing "ask" or "offer." For example, an instruction to sell 1,000 shares of stock at $3.00 which is currently priced at $2.00 would be nonmarketable, while an instruction to sell 1,000 shares of stock at or above $1.00 which is currently priced at $2.00 would be marketable, until such time as the price might drop below $1.00.

19. "Market orders," on the other hand, are instructions to conduct transactions at the current market price. "Marketable orders" refers to both market orders and marketable limit orders, because both orders can be at least partially filled at the current market price.

20. Certain broker-dealers hold shares of securities in their own inventory to create a market for buyers and sellers of those securities. These broker-dealers, who bear the risk of adverse fluctuations in the prices of those securities in exchange for the benefit of creating a market for the securities, are known as "market makers" or "wholesalers."

21. Historically, market makers paid fees to regional intermediaries for their services in executing trades with other local firms on behalf of the market maker. To increase a guaranteed supply of liquidity in their markets, market makers began offering payments not only to the intermediaries, but also to retail firms, including brokers, such as Schwab, in exchange for the retail firms' routing their orders to the market makers. This practice, which expanded from off-exchange securities (over-the-counter securities) to exchange-traded securities, came to be known as "payment for order flow" (which is defined below as "PFOF"). Over time, other trading venues, including exchanges, also began making payments for order flow.

22. Market makers – including Bernard Madoff, who in large part pioneered PFOF – traditionally profited from this system by realizing the "spread" on the underlying security; that is, by buying at the "bid" price and selling at the "ask" or "offer" price. For example, during the 1990s, Bernard Madoff Investment Securities – his broker-dealer operation – paid retail investors to direct order flow to a third market it had created. On this third market, Madoff's firm traded with the bid-ask spread, profiting at the margins. It is estimated that, in this manner, Mr. Madoff diverted approximately ten percent of total trading volume away from the New York Stock Exchange ("NYSE").

23. Little has changed. During the Class Period, wholesale market makers paid retail brokerages for order flow so that they could realize profits by exploiting the "dealer's turn," or the practice of buying at the bid price and selling at the offer. In other words, market makers incurred up-front costs by paying to trade with retail investors, but nevertheless turned a hefty profit by matching buyers and sellers and pocketing the spread.

24. Schwab, in its capacity as its clients' broker, receives payments for order flow from market makers, such as UBS, to which Schwab routes virtually all of its clients' non-directed trade orders. Non-directed orders are those orders in which the customers have not specified a specific venue, such as the NYSE, in which the trade should be executed.

25. As spreads have tightened, many venues adopted a "maker-taker model" to provide an incentive for brokers to list non-marketable orders—*i.e.*, orders priced outside the prevailing marketable rate that cannot be filled absent movement in the price of the security, such as

nonmarketable limit orders. This model, developed by the Island ECN in 1997, compensates brokers who "make" the market, or add liquidity, by listing non-marketable orders. On the other hand, the venue charges a fee to brokers who "take" liquidity by matching a marketable order with an existing bid or offer at the order price. The liquidity fee charged to the "takers" typically exceeds the liquidity rebate credited to the "makers," and the venue pockets the difference.

26. For example, a maker-taker venue may charge $0.003 per share for liquidity-taking orders (*i.e.*, marketable orders) and pay a rebate of $0.002 per share to post liquidity (*i.e.*, non-marketable orders). The venue would then generate in revenue the difference between the fee and the rebate, or in this example, $0.001 per share.

27. The maker-taker model has been criticized by numerous market participants, FINRA, and the SEC for creating significant conflicts of interests for broker-dealers. As explained by the SEC, "[i]n situations where a broker-dealer can earn a rebate or pay a lesser fee for routing its customer's orders to a particular venue, a conflict of interest may exist between the broker-dealer's duty of best execution and its own direct economic interest."

28. As opposed to the "maker-taker model," exchanges may implement the traditional "customer priority model," whereby exchanges charge transaction fees to market participants that interact with retail customer orders and use the proceeds to pay brokers for order flow. Customer orders are given priority without any fees being assessed. In addition to creating broker-dealer conflicts, the maker-taker model incentivizes the short-term flipping of stocks by sophisticated traders to realize various types of arbitrage, some of which are described herein, and disfavors retail investors who may hold stocks for longer periods of time.

29. Another manner in which venues enable brokers to benefit at the expense of retail investors' best interests is by allowing brokers to "flag" their clients' order as retail. Venues such as Bats EDGX Exchange, Inc. ("EDGX") pay brokers to mark their clients' orders as "retail," and in turn, venues charge hefty fees to their clients, commonly high frequency traders, for access to such information through venues' proprietary data feeds. Ordinary retail customers, however, are unable to afford access to these feeds, and thus receive no advantage for their orders being flagged as "retail." Meanwhile, high frequency traders or other market actors that subscribe to the feeds

may use this information asymmetry to, for example, strategically execute against retail orders when their computerized trading models foresee shifts in the market for a given security.

30. By marking which orders are placed by retail customers through such retail attribution programs, brokers compromise the integrity of the order and make it easy for sophisticated traders with access to the proprietary data feeds to employ strategies which take advantage of "mom-and-pop" investors.

B. Schwab Is A Discount Stock Broker with a Duty of Best Execution that Accepted Order Routing Payments

31. During the Class Period, Schwab was one of the world's largest discount broker-dealers. According to Schwab's 2012, 2013, and 2014 Forms 10-K, its "daily average revenue trades" (*i.e.*, the daily average number of client trades that generate trading revenue) was 303,800 in 2011; 282,700 in 2012; 295,000 in 2013; and 298,200 in 2014. Schwab's trading revenue was $927 million in 2011, $868 million in 2012, $913 million in 2013, and $907 million in 2014.

32. In its capacity as a broker for retail clients, when Schwab receives a non-directed order from its clients, it must act in accordance with its duty to provide the best execution of that trade and determine the market venue that would provide, among other considerations, the fastest fill (*i.e.*, execution of the order as quickly as possible), the largest fill (*i.e.*, transaction of as much of the order volume as possible), and the best price and greatest opportunity for price improvement (*i.e.*, realization of a superior price than the one quoted at the time that the order is placed). Over 95% of retail orders placed with Schwab are non-directed. Schwab acknowledges that it is bound by the duty of best execution when routing non-directed orders, and asserts that it takes into account "execution price, opportunities for price improvement, market depth, order size, the type of security, speed, accuracy, and system availability,"[2] as required by FINRA Rule 5310.

33. Throughout the Class Period, Schwab, in its capacity as its clients' broker, received PFOF from market makers, such as UBS, to which Schwab routed virtually all of its clients' non-

[2] Charles Schwab, "*Understanding Execution and Order Routing*," http://www.schwab.com/public /schwab/nn/legal_compliance/important_notices/understanding_execution.html. (2011-2014)

directed trade orders. Schwab was under this legal and regulatory duty to seek best execution for its customers' orders for the entire Class Period. This duty of best execution is derived from the duty of loyalty established in common law principles of agency, pursuant to which an agent is obligated to act in the best interests of the agent's principal at all times.[3] In the context of transacting in securities, best execution requires that a broker such as Schwab seek the terms most favorable to the client.

34. When securities are traded in different venues, best execution requires, absent different client instruction, that a broker-dealer ensure that the client's order is routed to the best possible venue. Generally, a broker achieves best execution when it endeavors to obtain the best price available, execute the transaction in the shortest possible time frame, maximize the likelihood that the transaction is executed in its entirety, and, where possible, seek "price improvement" – the execution of a trade at a price better than the best current public quote.

35. SEC Release No. 34-37619A, titled "Order Execution Obligations," dated September 6, 1996, provides that: "[The] duty of best execution requires a broker-dealer to seek the most favorable terms reasonably available under the circumstances for a customer's transaction." The SEC Release further states that:

> The duty of best execution evolves as changes occur in the market that give rise to improved executions for customer orders, including opportunities to trade at more advantageous prices. As these changes occur, broker-dealers' procedures for seeking to obtain best execution for customer orders also must be modified to consider price opportunities that become "reasonably available."

[3] The best execution duty is not only privately enforceable, but is also regulated by the SEC and FINRA. *Order Execution and Routing Practices*, 17 C.F.R. § 240 [Release No. 34-43590, File No. S7-16-00] (effective date January 30, 2001) ("Final Rule"), *available at* http://www.sec.gov/rules/final/34-43590.htm ("A broker-dealer must consider several factors affecting the quality of execution, including, for example, the opportunity for price improvement, the likelihood of execution (which is particularly important for customer limit orders), the speed of execution, and the trading characteristics of the security, together with other non-price factors such as reliability and service."); FINRA Rule 5310, *Best Execution and Interpositioning* (May 31, 2012), *available at* http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=10455.

36. Former National Association of Securities Dealers ("NASD") Rule 2320, effective as of May 9, 2011 until the adoption of Rule 5310,[4] provided that Schwab, as a broker-dealer, was obligated to "use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the ***resultant price to the customer is as favorable as possible under prevailing market conditions***." (Here, as elsewhere, emphasis is added unless otherwise noted). Among the factors to be considered in determining whether a broker used reasonable diligence were: "(A) the character of the market for the security, *e.g.*, price, volatility, relative liquidity, and pressure on available communications; (B) the size and type of transaction; (C) the number of markets checked; (D) accessibility of the quotation; and (E) the terms and conditions of the order which result in the transaction, as communicated to [Schwab]."

37. Financial Industry Regulatory Authority ("FINRA") Rule 5310, which superseded NASD Rule 2320 on May 31, 2012, incorporates all of that Rule's provisions concerning a broker-dealer's duty of best execution.[5]

38. FINRA also elaborated on the duty of best execution in Regulatory Notice 15-46, Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets, dated November 29, 2015, which noted that the SEC's Release No. 34902 (October 27, 1994), 59 FR 55006, 550009, provided that "an order routing inducement, such as receipt of payment for order flow, cannot be allowed to interfere with a broker-dealer's duty of best execution." FINRA stated clearly that "firms should not allow access fees charged by particular venues to inappropriately affect their routing decisions, and, in general, a firm's routing decisions should not be unduly influenced by a particular venue's fee or rebate structure."

39. FINRA instructs that when "a firm is routing order flow for automated execution, or internally executing such order flow on an automated basis, the SEC has indicated that simply obtaining the national best bid/offer price ("NBBO") may not satisfy a firm's best execution obligation, particularly with respect to small orders," because by routing to a venue that simply

[4] NASD, Rule 2320, *Best Execution and Interpositioning* (May 9, 2011).

[5] FINRA Rule 5310, *Best Execution and Interpositioning* (May 31, 2012), *available at* http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_ id=10455.

executes at the NBBO a broker sacrifices the potential to obtain a superior execution price. Automatic order routing runs afoul best execution where it is undertaken blindly, without regard to whether alternative venues would have provided superior execution quality.

V. SUBSTANTIVE ALLEGATIONS

A. Schwab Stated that It Adhered to Its Duty of Best Execution

40. Throughout the Class Period, Schwab claimed to consider factors relevant to its legally binding duty of best execution when routing clients' orders. The Internet Archive "Wayback Machine" shows that in each year during the Class Period,[6] Schwab's website stated that "[i]n order to provide an exceptional execution, there are a number of factors to be considered, including: ***execution price, opportunities for price improvement, market depth, order size, the type of security, speed, accuracy, and system availability***."[7] Schwab further claimed that, during the Class Period, it worked "diligently to meet and exceed" the best execution criteria established by the SEC in 2001,[8] and "to ensure we work toward our clients' best interests."[9]

41. Schwab's statements concerning best execution resided in its customer agreements. To open a Schwab brokerage account, individual clients were required to fill out and sign an application for a Schwab One Brokerage Account. During the Class Period, the application provided:

> [Y]our signature signifies and constitutes your agreement that this account and your relationship with Schwab will be governed by the Application Agreement and all incorporated agreements and disclosures, including, but not limited to, the Schwab One® Account Agreement and the *Charles Schwab Pricing Guide*, each as amended from time to time (the "Agreement and Disclosures").

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[6] Specifically, Plaintiffs refer to archives of Schwab's website captured on January 17, 2011, July 19, 2012, July 5, 2013, and July 4, 2014. *See* https://archive.org/web/.

[7] Charles Schwab, "*Understanding Execution and Order Routing*," http://www.schwab.com/public /schwab/nn/legal_compliance/important_notices/understanding_execution.html. (2011-2014)

[8] *See* Rule 11Ac1-5 and Rule 11Ac1-6 (renamed in 2005 under Regulation NMS to become Rule 605 and Rule 606), Final Rule, *available at* http://www.sec.gov/rules/final/34-43590.htm.

[9] Charles Schwab, "*Understanding Execution and Order Routing*," http://www.schwab.com/public /schwab/nn/legal_compliance/important_notices/understanding_execution.html. (2011-2014)

42. By their terms, the Application Agreements during the Class Period incorporate the Schwab One Account Agreement (which during the Class Period are referred to as "Account Agreements"). The 2013 and 2014 versions of the Account Agreements, under the heading "Order Routing and Execution," named UBS as one of several venues to which Schwab may route customer orders and represented that "Schwab also routes orders directly to all major exchanges and alternative trading systems, including Electronic Communication Networks (ECNs)."

43. Specifically, the 2013 and 2014 Account Agreements provided that:

> Schwab routes equity and options orders for execution to UBS Securities LLC ("UBS") and other broker-dealers, who may act as market maker or manage execution of the orders in other market centers. Schwab also routes orders directly to all major exchanges and alternative trading systems, including Electronic Communication Networks (ECNs).

44. The 2013 and 2014 Account Agreements obliquely referenced an "order routing agreement with UBS" as partial consideration for the sale of Schwab's capital markets business in 2004. In fact, on August 31, 2004, UBS announced that it would acquire Charles Schwab SoundView Capital Markets, the capital markets division of Schwab Corp., for $265 million. Specifically, UBS purchased Schwab's institutional trading and market making operations and when UBS completed the acquisition of Schwab's capital markets division, the two companies entered into the Equities Order Handling Agreement, effective October 29, 2004 (the "Handling Agreement").

45. The 2013 and 2014 Account Agreements specifically provided that Schwab routes orders only after considering execution quality metrics, as required by FINRA Rule 5310. Because the duty of best execution is non-delegable, at all times Schwab was responsible for UBS' execution quality, and any failure of UBS to provide best execution may be imputed to Schwab.

46. Nowhere did Schwab disclose that it was giving priority to the Handling Agreement, to the detriment of true execution quality metrics, such that Schwab's promises to adhere to its duty of best execution were misleading.

B. Schwab Omitted Material Facts Regarding Its Duty of Best Execution

47. During the Class Period, Schwab omitted to disclose the material fact that Schwab's routing decisions were predetermined in accordance with the Handling Agreement. Pursuant to the Handling Agreement, Schwab agreed to route virtually all its customer's non-directed trades to UBS, regardless of whether the routing satisfied Schwab's duty of best execution. Schwab failed to disclose that from 2004 through the end of 2014, and throughout the Class Period, Schwab routed nearly all of its clients' orders pursuant to the Handling Agreement, which required Schwab to route ***95%*** of its clients' orders to UBS. Schwab failed to disclose, during the Class Period, that, in return for its sending customer's orders to UBS, UBS agreed to pay Schwab $100 million per year and waive all commissions otherwise chargeable to Schwab. Throughout the Class Period, pursuant to the Handling Agreement, Schwab also agreed to pay UBS millions of dollars in liquidated damages if Schwab failed to send at least 95% of clients' orders to UBS. There is no reasonable explanation for UBS's willingness to pay over $100 million for Schwab's orders other than that UBS intended to profit off of those orders to the customers' detriment.

48. The following table shows the percentage of non-directed trades for stocks trading on each of the below-listed exchanges that Schwab routed to UBS during the Class Period and afterwards:

Date	NYSE	Amex, or Regional Exchange	NASDAQ
Class Period			
Q1 2012	99.70%	99.90%	99.90%
Q2 2012	98.70%	98.70%	93.80%
Q3 2012	99.40%	99.60%	99.90%
Q4 2012	99.10%	99.50%	99.90%
Q1 2013	99.20%	99.70%	99.90%
Q2 2013	97.80%	96.50%	97.40%
Q3 2013	94.70%	93.80%	94.60%
Q4 2013	93.20%	96.50%	94.50%
Q1 2014	93.50%	93.90%	94.00%
Q2 2014	94.50%	95.70%	94.40%
Q3 2014	93.70%	96.00%	94.50%
Q4 2014	93.80%	95.80%	93.90%
Post Class Period			
Q1 2015	76.00%	75.40%	77.40%
Q2 2015	51.45%	51.47%	52.10%
Q3 2015	52.40%	51.30%	51.60%
Q4 2015	51.50%	50.70%	51.30%
Q1 2016	47.10%	45.80%	46.50%
Q2 2016	38.10%	36.60%	37.20%
Q3 2016	38.10%	36.90%	37.20%
Q4 2016	35.10%	33.70%	34.30%
Q1 2017	19.80%	20.30%	19.30%
Q2 2017	18.90%	19.70%	18.70%

49. If UBS had in fact been providing best execution, one would have expected Schwab to continue routing the majority of its clients' trades to UBS to comply with its duty of best execution. Notably, the steady decline in the percentage of trades that Schwab routed to UBS correlated with Schwab's clients' awareness, starting in 2015, of the impact of order routing payments on brokers' routing behavior and the inferior execution quality that may result when brokers accept PFOF or route to venues that offer liquidity rebates.

50. Schwab failed to disclose that in the Handling Agreement, UBS affirmatively disavowed any duties whatsoever to Schwab's customers, stating specifically that "the accounts for which Orders are transmitted are 'customers' of Schwab . . . and not of [UBS]." Thus, Schwab never disclosed that the Handling Agreement placed the duty of best execution on Schwab, even though Schwab exercised virtually no control over the execution of orders. The Handling

Agreement established an Execution Quality Committee but provided that UBS would appoint three of its six members. Thus, Schwab did not have control over the entity tasked with ensuring UBS's execution quality on behalf of Schwab's clients. Moreover, although the Handling Agreement purportedly provided Schwab the right to reroute its order flow elsewhere if UBS failed to meet certain nonpublic performance standards set forth in the Agreement, Schwab never exercised that right during the Class Period.

51. The Handling Agreement had an initial expiration date of October 31, 2012. However, in November 2011, Schwab agreed to extend the agreement through at least October 31, 2014, thereby ensuring that Schwab would continue to route its Clients' orders without consideration of the factors relevant to a proper execution quality analysis. Schwab still did not disclose any of the material facts set forth above to its clients, which were necessary to render Schwab's promises of best execution not misleading.

52. Schwab collected approximately $100 million from UBS for each year the Handling Agreement was in effect. However, the publicly available version of the Handling Agreement redacted the amount of money UBS paid to Schwab for routing to UBS almost all of Schwab's customers' non-directed trades. Analysts estimated that Schwab generated $100 million in revenue from payments for order flow in 2013.[10] Schwab disclosed in its annual report on Form 10-K, filed with the SEC on March 22, 2013, that, "In November 2012, the Company began receiving additional order flow rebates from market venues to which client orders are routed for execution. Order flow revenue increased by $23 million due to this revenue and the inclusion of a full year of optionsXpress' order flow revenue," but omitted the total amount received from UBS.

53. In its annual report on Form 10-K, filed with the SEC on February 24, 2016, Schwab disclosed for the first time that "[o]rder flow revenue was $103 million during 2015 compared to $114 million during 2014." Thus, Schwab earned over $100 million a year for directing its customers' orders to UBS—a substantial incentive to avoid Schwab's best execution

[10] Bradley Hope, "*Fallout From High Frequency Trading Hits Brokerages,*" The Wall Street Journal, April 6, 2014, http://on.wsj.com/XxJGtt.

duties—which Schwab had not previously disclosed.

54. Schwab failed to disclose that UBS profited from Schwab's clients by doing the following with respect to the routed trades: (1) internalizing the trade, *i.e.*, matching the order internally against UBS's own inventory; (2) placing the trade in the UBS dark pool, exposing it to predatory high-frequency traders ("HFT"); or (3) re-routing the trade in a manner allowing UBS to obtain a liquidity rebate.

55. In a March 2007 supplement to *Traders Magazine* titled "Best Execution: Industry Leaders Address the Search for Best Execution," there is an interview with three executives of UBS Investment Bank titled "Fragmentation: Perception vs. Reality." In response to the question, "What is the distinction of doing business with UBS from a best execution standpoint?," one UBS executive explained:

> It starts with liquidity. Since we trade more than 400 million shares in the United States every day, it follows to reason ***we can create more crossing opportunities than any other firm***. We make that happen seamlessly through UBS-PIN.
>
> ***PIN [UBS's Price Improvement Network] allows institutional clients to interact with our retail flow, which must get executed.*** That's radically different from an institution-only pool, which often doesn't have the same execution urgency.
>
> ***We're allowing our [institutional] customers to capture the entire spread.*** In a dark pool, they'd be crossing at mid-point, at best. And in most cases on the open market, they'd list an offer and pay the entire spread. Trades completed within PIN represent a great deal of information that never hits the open market, helping maintain price equilibrium. Compared to the other dark pools, PIN is a stream of liquidity. Orders can stay in PIN and then periodically go out to the other dark pools.

(Emphasis added.)

56. According to UBS's "ATS FAQs": "The UBS Price Improvement Network in the US ('UBS PIN (US)') is a differentiated segment of liquidity operated within the UBS ATS. UBS PIN (US) facilitates interaction between any combination of UBS Retail Orders, UBS institutional algorithmic order flow, and UBS Principal Orders." UBS ATS is an alternative trading system – in other words, a dark pool. "Crossing opportunities" refers to "crossing trades," in which buy and sell trade orders within the same venue are matched with one another. In other words, the UBS PIN allowed UBS's institutional clients to trade against retail orders received by UBS – such as

those routed from Schwab. This allowed UBS's institutional clients to capture the entire bid-ask spread, but at the expense of Schwab's clients.

57. Schwab also failed to disclose that PFOF and internalization depended on the ability to avoid trading with informed traders – *i.e.*, those who know where the stock price is headed. This is why internalizers paid for retail order flow from the likes of Schwab. Retail investors were presumed to be uninformed traders or "dumb money" in that they were typically less aware of short-term price movements in a stock and not seeking to predict price movements in the next minute or hour. This made it easy for firms that could identify short-term price changes to profit from retail orders.

58. In addition, internalizers made money on the spread between retail investors' bids and offers. Internalization is allowed under market regulations as long as the price matches or beats the displayed NBBO. As explained below, merely matching NBBO did not equate achieving best execution.

C. Defendants' Own Statements Demonstrate Scienter

59. On February 29, 2000, Schwab Chairman, Charles R. Schwab, testified before the U.S. Senate Banking Committee about the evolution of financial markets. During his testimony, Mr. Schwab acknowledged the conflict of interest inherent in PFOF:

> Of course, there's a lot of concern that these rebates can pose a conflict for brokers. I worry too about payment for order flow. If you'll remember, Schwab took a strong stand a few years ago and tried to lead the way to eliminate the practice. Unfortunately, competition forced us to back off. However, to ensure that the potential conflict doesn't undermine our goal of getting best execution for customers, firms like ours go to extraordinary lengths to measure and compare execution quality among the various markets to ensure that orders are routed to markets that offer the best executions, regardless of whether they offer rebates. Execution quality is what drives order routing decisions, and our customers would not have it any other way.

Mr. Schwab thus indicated that if his company were going to accept payments for order flow, then it must "go to extraordinary lengths to measure and compare execution quality among the various markets to ensure that orders are routed to markets that offer the best executions." Mr. Schwab gave this testimony before Schwab entered into the Handling Agreement with UBS in 2004, at which point Schwab set aside Mr. Schwab's admonition and began to route 95% of client orders to

UBS, without taking any steps to "measure and compare execution quality" or to "ensure that orders are routed to the markets that offer the best execution..

60. Fourteen years later, in April 2014, Schwab took an even stronger position on the evils of the dark pools, when Defendants made statements demonstrating that they were fully aware that Schwab's customers would be harmed by being exposed to HFTs. For example, Schwab's Chief Executive Officer ("CEO"), Walter Bettinger, and Mr. Schwab released a statement on April 3, 2014, subtitled "High-frequency trading is a ***growing cancer*** that needs to be addressed." Referencing an editorial in The Wall Street Journal from July 10, 2013, Mr. Bettinger reiterated that "***high-frequency trading has run amok*** and is corrupting our capital market system by ***creating an unleveled playing field for individual investors*** and driving the wrong incentives for our commodity and equities exchanges." The statement continued:

> High-frequency traders are ***gaming the system***, ***reaping billions*** in the process and undermining investor confidence in the fairness of the markets.
>
> * * *
>
> High-frequency trading pumped out over 300,000 trade inquiries each second last year, up from just 50,000 only seven years earlier. Yet actual trade volume on the exchanges has remained relatively flat over that period. It's an explosion of head-fake ephemeral orders – not to lock in real trades, ***but to skim pennies off the public markets by the billions. Trade orders from individual investors are now pawns in a bigger chess game***.
>
> * * *
>
> High-frequency trading isn't providing more efficient, liquid markets; it is a ***technological arms race designed to pick the pockets of legitimate market participants***.

61. At the same time Schwab's CEO and its Chairman released this statement, Schwab knew UBS was routing Schwab's customers' trades to dark pools. Schwab was well aware that UBS had one of the largest dark pools in the country, UBS ATS.[11] Further, Schwab knew that UBS had a proprietary and highly sophisticated high frequency trading desk, whose bread and

[11] UBS ATS identified retail orders, such as the trades Schwab was routing to UBS, through a retail attribution system that made it easier for sophisticated traders, such as HFTs, to prey on them.

butter was taking advantage of non-directed retail orders like those from Schwab's customers. Indeed, UBS's high frequency trading desk had exclusive access to this order flow through internalization.

62. Mr. Bettinger's April 3, 2014 statement also applauded the efforts of New York Attorney General Eric Schneiderman and his intention to "'continue to shine a light on unseemly practices in the markets,' referring to the practices of high-frequency trading and ***the support they receive from other parties*** including the commodities and equities exchanges." At the same time Mr. Bettinger made this statement, however, Schwab was providing "support" to the HFTs participating in UBS's dark pools, for which Schwab's order flow provides liquidity. Defendants' statements were made before UBS revealed that it was under investigation by Mr. Schneiderman's office over its dark pools, in addition to an SEC investigation which resulted in UBS agreeing to a settlement of more than $14.4 million.

63. Recognizing this tension, shortly after the issuance of Mr. Bettinger and Mr. Schwab's statement railing against HFTs, Schwab quickly walked it back. In an April 4, 2014 statement, Mr. Bettinger downplayed his and Mr. Schwab's previous statements on HFTs as merely being an issue of what they saw as "***perceived*** fairness in the equity markets. I have to reemphasize the word I use there, perceived fairness – we don't win over a population of individual investors with technical and nuanced intellectual debates – ***you are dealing with an issue of perception***." Mr. Bettinger continued: "Our view is that there is no reason for these efforts [to restore confidence] to get undermined by a ***perception, and again I emphasize perception***, of unfairness in our equity markets." Mr. Bettinger also made clear that Schwab would ***not*** be taking any action in response to the PFOF issue, stating "we don't have any plans on changes with respect to our current approach and our prioritization in client best execution, or our process for payment for order flow."

64. Schwab's striking rhetorical reversal from deriding HFT as a "cancer" "run amok" to merely an issue with the "perception of fairness" in the market did not go unnoticed. As an analyst from Sandler O'Neill & Partners reported on April 25, 2014 under the headline "HFT

Comments Simply Inconsistent," "We found [Schwab] CEO comments regarding HFT extremely INCONSISTENT," (emphasis in original) and provided a comparison chart of the two statements.

65. Schwab recanted its statements regarding HFT because it knew that its clients were being victimized by sophisticated traders, including HFTs, in UBS's dark pool. Because Schwab routed its customers' trades almost entirely to UBS, pursuant to its undisclosed prioritization of receiving compensation for retail order flow over the factors relevant to a proper best execution analysis, Schwab's clients were targeted in UBS's dark pool by HFTs and thus lost opportunities for price improvement, if their trades were executed at all.

66. The magnitude of order flow revenue that Schwab received during the Class Period is substantial proof that Schwab knew that routing trades to UBS under the Handling Agreement was wrongful. Revenue from Schwab's Handling Agreement with UBS was a material source of profit for Schwab during the Class Period. Schwab did not report its 2011 order flow revenue. As reported in its 2012 Form 10-K, Schwab's order flow revenue increased by $23 million in 2012 when it began receiving additional order flow rebates and had a full year of optionsXpress' order flow revenue. As reported in its 2014 Form 10-K, Schwab began receiving an increase in order flow revenue in November 2012. Schwab's total order flow revenue was $99 million in 2013 (roughly 9.2% of net income)[12] and $114 million in 2014 (roughly 8.6% of net income).[13] Given that upwards of 95% of Schwab's non-directed orders were routed to UBS in 2013 and 2014, the overwhelming majority of those years' order flow revenue came from UBS.

67. Schwab's senior executives received substantial additional compensation as a result of the payments from UBS. Both Mr. Bettinger and Mr. Schwab received cash bonuses based on earnings per share, a performance metric that includes the income Schwab realized from its receipt of order routing payments. Based on the information set forth in Schwab's public filings and assuming that Schwab realized $100 million in order routing payments each year, if not for this income, Mr. Bettinger would have received approximately $300 million per annum less in bonus

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[12] *See* Bradley Hope, "*Fallout From High Frequency Trading Hits Brokerages*," The Wall Street Journal, April 6, 2014, http://on.wsj.com/XxJGtt.

[13] *See* 2015 Form 10-K.

compensation from 2011-2014, and Mr. Schwab would have received approximately $100 million per annum less in that same period.

68. In addition, changing language in the Account Agreements from 2011 and 2012 as compared to 2013 and 2014, demonstrates that Defendants acted with scienter.

69. The Account Agreements for 2011 and 2012 referenced an "execution services agreement" as partial consideration for the sale of Schwab's capital markets business, and Schwab's commitment to route "most types of equity and listed options orders through UBS." The Account Agreements further provided that Schwab did not receive PFOF from UBS:

> Part of the consideration Schwab received for the sale of its capital markets business to UBS in 2004 related to the execution services agreements with UBS and Schwab's commitments to route most types of equity and listed options orders through UBS for eight years. However, ***Schwab does not earn rebates or other consideration from UBS or other firms or markets for equity and options orders routed through UBS or routed by Schwab directly.***

(ECF No. 47-9 at 248, 251.) These statements were misleading, however, because the Account Agreements omitted the fact that the Handling Agreement required Schwab to route ***95%*** of its clients' orders to UBS, for which UBS paid Schwab $100 million a year.

70. In the Account Agreements for 2013 and 2014, the above-quoted language was deleted and replaced with language providing that Schwab "***may***" receive compensation for routing order flow. The Account Agreements said nothing about liquidity rebates. Further, the Agreements only obliquely referenced an "order routing agreement with UBS" as partial consideration for the sale of Schwab's capital markets business:

> Schwab may receive remuneration, such as liquidity or order flow rebates, from a market center to which orders are routed. In addition, part of the consideration received by The Charles Schwab Corporation for the sale of its capital markets business to UBS in 2004 related to an order routing agreement with UBS, which has been extended.

(ECF No. 47-9 at 254, 256.) Again, Schwab failed to disclose that the Handling Agreement required substantially all of Schwab's trades to be routed to UBS, for which UBS paid Schwab $100 million a year, notwithstanding that such disclosure was necessary to make Schwab's promises to consider factors relevant to a proper best execution analysis not misleading.

71. The gradual release of additional information regarding compensation for order flow in connection with the Handling Agreement demonstrates that Defendants were acutely aware that their omissions were material in regard to Schwab's duty of best execution.

D. Reliance Is Presumed

72. Lead Plaintiffs and the Class are entitled to a presumption of reliance under *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972), because the claim asserted herein is predicated on material omissions of fact that Defendants had a duty to disclose.

E. Schwab's Omissions Damaged Plaintiffs and the Class

1. Schwab Failed to Disclose that Market Makers that Pay for Order Flow Profit by Disadvantaging the Orders Comprising the Flow

73. During the Class Period, Schwab omitted material facts about its arrangement with UBS pursuant to which it received hundreds of millions of dollars in order flow revenue. Schwab's lucrative arrangement with UBS invites the obvious question: Why was UBS willing to pay Schwab more than $100 million annually for order flow if it was in turn providing best execution of those trades? As alleged herein, it was not obtaining the best possible execution for Schwab's customers.

74. A broker-dealer's opportunity to provide price improvement for a client's trade comes at the direct expense of payments for order flow and liquidity rebates. Given that market-makers make small amounts of money off of the spread on each trade, and that market-makers are only willing to pay so much of that money back to the broker, the payment comes in the form of either price improvements or payment for order flow. Indeed, even brokers sometimes acknowledge this inherent conflict. Gregg Murphy, senior vice president of brokerage products at Fidelity Investments, explained: "***The market makers are not both going to pay you a lot for order flow and then turn around and provide your customers with a high level of price improvement***[.]"

75. In a speech given on June 5, 2014, titled "Enhancing Our Equity Market Structure," SEC Chair Mary Jo White acknowledged the conflict of interest inherent in compensating brokers for order flow. In that speech, she said:

> A fourth area of concern is broker conflicts and how they are exacerbated or mitigated by different trading venues. Most investors rightly rely on their brokers to navigate the dispersed market ecosystem on their behalf. But monitoring the execution quality and costs of orders can be difficult for even the most sophisticated investors, given the number of trading venues and order types available to brokers.
>
> The cost to the broker for executing in different venues can vary widely. Some venues make payments directly to brokers as a means to attract particular types of order flow. These payments include the liquidity rebates paid by exchanges that use a "maker-taker" fee structure. They also include payments offered by off-exchange market makers to retail brokers for the marketable order flow of their customers.
>
> When fees and payments are not passed through from brokers to customers, they can create conflicts of interest and raise serious questions about whether such conflicts can be effectively managed.[14]

76. SEC Chairwoman White has also voiced skepticism about brokers' ability to secure price improvement while receiving payment for order flow: "When retail brokers negotiate with off-exchange market making firms for directing customer's marketable orders to those firms, why do the negotiations include both the level of price improvement expected for investor orders and the payment of millions of dollars to the broker?"

77. Further, on May 11, 2015, SEC Commissioner Luis Aguilar issued a public statement titled "U.S. Equity Market Structure: Making Our Markets Work Better for Investors."[15] In that statement, he called for a careful examination of order routing payments. He observed that critics "contend that incentives like the maker-taker pricing model and payment for order flow arrangements pose irreconcilable conflicts of interest for broker-dealers that deprive investors of their right to best execution." Responding to the claim that order routing payments results in lower costs to broker customers, Aguilar stated that while that may be true, "the Commission should look into whether customers could be made better off."

78. Importantly, in the same statement, Mr. Aguilar also said the following:

> In addition, the justifications that underpin the payment for order flow regime should be put to the test. For instance, brokers claim that retail customers benefit from the price improvement they receive when their orders are sold to OTC market makers. But there is evidence suggesting that retail investors could do better. For

[14] Available at https://www.sec.gov/News/Speech/Detail/Speech/1370542004312.

[15] Available at https://www.sec.gov/news/statement/us-equity-market-structure.html.

> example, one broker that sends approximately 95% of its customers' orders to exchanges claims that, for the past 8 years, it has consistently provided better price improvement than firms that sell their customers' orders to OTC market makers. Although the level of this price improvement varied, an independent assessment reveals that it has been as high as 53 cents per 100 shares, and has been at least 30 cents per 100 shares two-thirds of the time.

Mr. Aguilar thus believed that claiming minimal price improvement is inadequate. The amount of the price improvement matters for purposes of evaluating whether PFOF is compromising the duty of best execution.

79. Finally, in the same May 11, 2015 statement, Mr. Aguilar called for enhanced disclosures from brokers regarding order routing payments:

> Rule 606 should promptly be revised to require brokers to disclose to customers the total amount of payments for order flow the broker receives, as well as the average amount of price improvement customers receive on orders sold to OTC market makers. The rule should also be revised to require brokers to disclose the total execution costs of their clients' trades, so investors can see how payments for order flow and other factors affect their trading costs. For example, brokers should report not only direct costs, such as commissions and fees paid, but also all benefits that may have reduced those costs, such as price improvement, liquidity rebates, and payments for order flow.

80. In 2012, the United Kingdom's Financial Services Authority effectively banned order routing payments, finding that the conflict of interest between a broker and its client under order routing arrangements were incompatible with the duty of best execution. The practice is also banned in Canada.

81. With respect to non-marketable limit orders, UBS routinely routed such orders placed by Schwab's clients to exchanges employing a maker-taker model that offered the greatest rebate to liquidity-providing orders, without regard for the impact on execution quality. Liquidity-seekers, however, first absorb liquidity on inverted markets—*i.e.*, those that pay a rebate to the marketable order seeking to cross the spread and execute against a posted non-marketable limit order. Because they are filled first, orders posted on inverted exchanges not only have the fastest fill-speed and greatest fill-rate, but also are more likely to realize superior post-execution performance, as the market may move in their favor before nonmarketable orders posted on high take-fee venues are even filled. Even though inverted venues offer superior execution quality, however, UBS routed to high take-fee venues such as EDGX so that UBS would receive the

maximum liquidity rebate, even if it meant slower fills, lesser fill-rate, and inferior post-execution performance for Schwab's customers.

2. Schwab Failed to Disclose that the Handling Agreement Permitted UBS to Direct Retail Orders to Dark Pools to the Detriment of Schwab's Clients

82. In the United States, approximately 45 dark pools and as many as 200 internalizers compete with the thirteen public exchanges for order flow. Top internalizers include UBS, KCG Holdings, Citadel, and Citigroup.

83. The SEC summarized the conflicts created when a broker-dealer internalizes or routes order flow to affiliated venues:

> While constrained by its best execution obligation, a broker-dealer still may be incentivized to internalize customer order flow or route to an affiliated venue so that it can benefit from the execution by, among other things, capturing the trading profits or transaction fees. Internalization or execution at affiliated venues, however, may not offer the most favorable terms of execution. Likewise, a broker-dealer may be incentivized to first route customer order flow to venues with which it receives payment for order flow. Again, execution at such venues may not maximize the best execution opportunities of institutional orders. ***Accordingly, opportunities for internalization, or execution at affiliated venues or those with which the broker-dealers has payment for order flow arrangements, create additional potential conflicts of interest between the broker-dealer's duty of best execution and its own direct economic interest***.

84. UBS placed many of Schwab client orders in its dark pools. Schwab's clients' orders were unsophisticated, and UBS made them available to HFTs. HFTs executed many thousands of times the number of trades that an average retail investor made by utilizing computer algorithms to rapidly trade securities. These programs allowed the HFTs to opportunistically move in and out of positions in seconds, profiting by fractions of a cent, hundreds of thousands of times a day. As a result, the HFTs, and UBS, profited from Schwab's customers because they could exploit that order flow to obtain better prices on the same securities and monitor the marketplace.

85. Registered exchanges were required to provide the best bids and offers for every stock to Security Information Processors ("SIP"), which aggregate and publish the data. The SIP were intended to be a consolidated live stream of every exchange's best quoted bids and offers and

establish the NBBO for each stock. Throughout the Class Period, stock brokers were required by SEC regulation to execute retail customer orders at the NBBO or better.

86. Due to market fragmentation, however, during the Class Period, the SIP feed was no longer representative of the NBBO. Wholesalers and dark pools were not required to provide data to SIP (although they did report non-contemporaneous post-transaction data to FINRA). By the end of the Class Period, almost 40% of all U.S. stock trades, including most orders from retail investors, happened off the public exchanges, mostly with wholesaler internalizers or dark pools. This allowed for internalizers to take advantage of retail traders reliant upon the SIP, and this contributed to an increase in trading for which there is no price transparency.

3. Examples of How Retail Investors Are Damaged by PFOF and Dark Pools

87. The following example illustrates how a wholesaler like UBS profited by internalizing trade orders at the expense of a Schwab retail customer. Assume a wholesaler received a market order to buy 100 shares of Apple stock and a market order to sell 100 shares of Apple stock. If the NBBO for Apple stock is $100.00/$100.25, that means that the best quoted bid to buy Apple stock was $100.25 and the lowest quoted ask price to sell stock was $100.00. The wholesaler could buy 100 shares of Apple stock at $100.00 while simultaneously selling the same 100 shares at $100.25, earning $25.00.

88. In the above example, the wholesaler, as required, matched the NBBO for both the retail buyer and the retail seller, but these were not the best possible prices that the wholesaler could have given to them. Instead, the wholesaler could have allowed the two orders to interact with one another at a price of $100.12. In this scenario, both the buyer and the seller would have had a price improvement of approximately $0.12 per share. Thus, both sides would have been better off if they had been allowed to interact with each other rather than trade through internalizing wholesaler. Thus, the wholesaler’s profit-seeking was clearly in tension with the duty to obtain the most favorable terms reasonably available under the circumstances for the retail investor.

89. Not all investors have equal access to trade and quoted information. Many of these nonpublic exchanges (dark pools) have direct feeds that they provided to paying subscribers, but not to the public. Moreover, some investors were able to use advanced technology and physical proximity to obtain SIP data more quickly than others, giving rise to profit-making opportunities at the expense of retail investors. Traders with access to more recent prices could have used various methods to profit from investors with slower access to prices.

90. Using algorithmic code and rapid software and computers, internalizers sifted through retail order flow in the dark pools to identify unprofitable and profitable orders. The internalizer dumped the unprofitable orders to other venues and traded against the profitable ones.

4. Studies Show that PFOF Damaged Retail Investors

91. Recent studies demonstrate the conflict of interest posed by PFOF that damaged Schwab's retail investors during the Class Period. One study by the CFA Institute, released in July 2016, found that the percentage of retail-sized trades executing at the NBBO grew significantly after the United Kingdom banned order routing payments in May 2012.[16]

92. To assuage regulators about this conflict of interest, retail brokers and their wholesale partners provide retail investors with price improvement – *i.e.*, a lower price than the NBBO for a buy order or a higher price than the NBBO for a sell order. However, as alleged below, the price improvement for Schwab's customers is minimal and nowhere near what a retail investor would have gotten if Schwab had adhered to its duty of best execution during the Class Period. This is why brokers such as Schwab focus only on the percentage of the orders that receive price improvement rather than the amount of price improvement.

93. A recent academic study using data regarding Schwab customer orders conducted by Robert Battalio, Shane A. Corwin, and Robert Jennings confirms that brokerages routing nonmarketable limit orders to an exchange "that offers the highest liquidity rebates is inconsistent

[16] Sviatoslav Rosov, "*Payment for Order Flow: Internalisation, Retail Trading, Trade-Through Protection, and Implications for Market Structure*," CFA Institute, Aug. 17, 2016, http://www.cfapubs.org/doi/sum/10.2469/ccb.v2016.n8.1.

with maximizing limit order execution."[17] The study found that when brokers route orders based on higher liquidity rebates, their retail clients' nonmarketable limit orders filled slower and less often than similar orders on venues offering lower liquidity rebates. Using realized spreads to provide an estimate of the gross revenue earned by liquidity providers (the nonmarketable limit orders), the Battalio study found the lowest realized spreads occurred on the highest fee venues (highly correlated with the highest rebate venues). *In other words, when routed to maximize liquidity rebates, orders see measuredly inferior post execution performance relative to what they otherwise would have realized if routed to venues offering lower liquidity rebates*. The study stated that there is "a strong negative relation between take fees and several measures of limit order execution quality. ***Based on this evidence, we conclude that the decision of some national brokerages to route all nonmarketable limit orders to a single exchange paying the highest rebate is not consistent with the broker's responsibility to obtain best execution for customers.***" *Id*. at 5.

94. Referencing an earlier draft of the same academic study and testimony before the US Senate's Permanent Subcommittee on Investigations from 2012, Kor Trading on June 16, 2014 stated that "while brokers favor venues that give them the highest payments for their order flow . . . those same venues have the inferior execution quality compared to venues that do not provide such levels of payment." As Kor Trading, concluded, "[I]t may also be true that by inhibiting competition with backroom, off-the-record handshake payment deals for retail order flow, discount brokers are not getting the best execution possible for their customers."

95. Experts have provided numerous examples of how retail investors were hurt by dark pools and PFOF. Emmet Peppers of Interactive Brokers, which did not accept payment for order flow, provided two examples in an interview with the Alpha Architect blog on March 16,

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[17] *See* Robert Battalio, Shane A. Corwin, and Robert Jennings, *Can Brokers Have it All? On the Relation between Make-Take Fees and Limit Order Execution Quality*, last revised Oct. 29, 2015, *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2367462.

2015:[18]

> For example at the end of 2013, Facebook was a very hot stock and trading in the mid 50s going into 2014. Let's say you decided you wanted to own FB if the stock price dropped a bit. On Jan 2nd you put in a buy limit order with your broker for 1000 shares and decided on a limit price of 51.85. This is a strategy you often employ: to buy stocks as they drop instead of chasing them on their way up. If FB would 'correct' by just a few points from its price on Jan 2nd 2014 [FB traded in a range between 54.19-55.22 that day] then you would get filled. As your limit order waits patiently, a few weeks later on Jan 27th, FB opens at 54.73 but actually traded as low as 51.85 during the course of the day before going back up and closing the day at 53.55.
>
> Brokers who sell their customer order flow are unlikely to get any fill from the buyers of order flow until the stock actually trades below the limit price of the order they bought. This can be for many reasons that can bring up a whole other conversation, one obvious reason is because the buyers of order flow use the limit price as a free 'option' to try and gain pennies or to profit in brief arbitrage opportunities. In the above example, if you are with a broker who sells your order flow or internalizes it through some proprietary dark pool, then you may have unnecessarily missed out on buying up to 1000 shares of FB on what is now the 52 week low for FB stock as I write this.
>
> * * *
>
> What is actually a much more common occurrence is when someone puts in a limit order and then monitors the market as the price trades down towards their limit price. The stock price temporarily touches their limit price but then they see the market come right back up. This innocent investor loses patience after a couple seconds and ends up moving their limit price higher to chase the stock for a slightly higher price.

96. After Schwab routed virtually all of its non-directed order flow to UBS, UBS employed the various methods described above to trade against the Schwab retail order flow that it internalized. In return, Schwab customers received sub-penny price improvement and Schwab failed to adhere to its duty of best execution.

97. The UBS ATS allowed participants' orders to interact with all of UBS's U.S. equities liquidity and other institutional agency algorithmic trading flow from UBS's "liquidity partners." The huge retail order flow from Schwab allowed UBS ATS to offer added liquidity in the form of uninformed investors or "dumb money," which in turn attracted HFTs.

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[18] Available at http://blog.alphaarchitect.com/2015/03/16/shedding-light-on-payment-for-order-flow-insights-from-emmet-peppers/#gs.miUjVFw.

98. Indeed, on January 15, 2015, the SEC announced that UBS had agreed to pay more than $14.4 million, including a $12 million penalty and a disgorgement of $2.24 million, to settle charges of security violations related to the operation and marketing of UBS ATS. According to the SEC order,[19] UBS gave HFTs secret, illegal advantages in its dark pool over other investors who used the dark pool. Among other things, UBS developed particular order types and trading features that were designed almost exclusively for HFTs in the dark pool. The harmed investors included "many of the world's largest asset managers, broker-dealers, and institutional investors, who may place trades on behalf of all kinds of investors, including pension funds and ***individuals with retail brokerage accounts***."

99. Starting in July 2015, after the Class Period, under the auspices of the Financial Information Forum ("FIF"), certain wholesalers and retail brokers began disclosing additional trade execution quality statistics. Among other things, participants disclosed, for five ranges of order sizes, the following: (1) average order size; (2) price improvement percentage; (3) average savings per order; and (4) average execution speed. These disclosures were separately reported on S&P 500 stocks and other exchange-listed stocks. Three retail brokers participated – Schwab, Fidelity, and Scottrade.

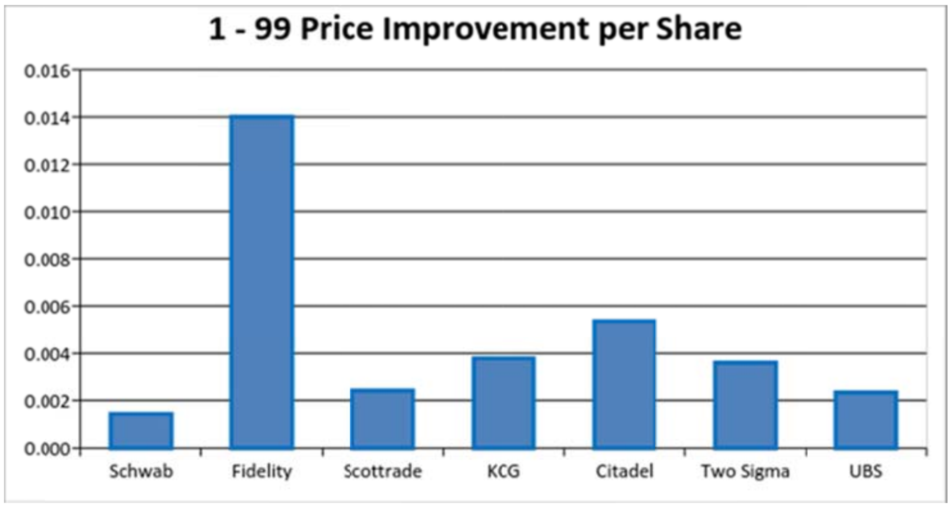
100. The FIF statistics provide an incomplete picture, however. The data referenced in the previous paragraph covers only market orders – *i.e.*, those that execute immediately – but not nonmarketable limit orders, which are not executed immediately but once a stock price reaches a certain threshold. From 2012 through the present, at both Schwab and Fidelity, market orders account for approximately half of trading at NYSE companies.

101. Schwab's FIF statistics show that a high percentage of its retail orders resulted in price improvement. But as explained above, merely matching or providing minimal improvement on the NBBO does not establish that a broker has complied with its duty of best execution.

102. For example, a comparison between Schwab and Fidelity demonstrates that price improvement alone, without examination of the extent of such improvement, is not sufficient to

[19] Available at https://www.sec.gov/news/pressrelease/2015-7.html.

demonstrate best execution. In 2014, Fidelity stopped taking PFOF, which showed in its 2015 FIF statistics. As shown in an analysis conducted by Kor Trading,[20] and in the graph below, in the first quarter of 2015,[21] for the most common of order sizes, those of 99 or fewer shares, Fidelity's price improvement on trades of S&P 500 stocks was over five times larger than those averaged by Scottrade's and over ten times larger than Schwab's. Fidelity provided more than $0.0125 of price improvement per share, compared to the less than $0.0020 price improvement per share provided by Schwab.



103. Further, in comparing Schwab and Fidelity, there is no tradeoff between the refusal to accept PFOF and better price improvement, on the one hand, and accepting PFOF and lower trading costs, on the other hand. During the Class Period, Fidelity's costs on regular stock trades are actually lower – $7.95 per trade versus $8.95 for Schwab. Thus, the PFOF from UBS is flowing to Schwab's bottom line rather than being passed on to its customers in the form of lower trading costs.

104. Further, in analyzing the FIF statistics, Kor Trading notes "the disparity of Price Improvement and Average Savings per Order given to Odd Lot trades. Schwab averages just 68% Price Improvement with Odd Lot Trades in S&P 500 stocks while Round Lot trades from 100-

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[20] David Lauer, "*Enhanced Retail Execution Statistics Are Out*," July 14, 2015, http://kortrading.com/blog/enhanced-retail-execution-statistics-are-out.

[21] By this point, after the Class Period, Schwab had stopped sending 95% of its retail orders to UBS so the Class Period price improvement was likely worse.

9,999 shares averaged 85% in Price Improvements. Worse yet, S&P 500 Odd Lots with Schwab averaged just $0.05 in savings per order compared to $4.33 for orders from 100-9,999 shares." As Kor Trading explains, Odd Lot orders generally encompass retail investors: "Odd Lots also comprise a significant share of overall transactions as retail investors typically invest by dollar amount, providing active S&P 500 stocks like AAPL, CMG, NFLX, PCLN, GOOG and MA with a high percentage of retail Odd Lot trades."

5. Lead Plaintiffs Were Damaged by the Material Omissions

105. During the Class Period, Schwab engaged in a scheme to deceive its customers by omitting material facts about The Handling Agreement and Schwab's trade order routing practices and by failing to disclose that its customers would be harmed by Schwab's routing practices. These material omissions caused losses to Lead Plaintiffs and the Class when Schwab executed their non-directed trade orders by blindly routing orders to UBS, without regard to best execution, to be preyed upon in UBS' dark pools, which resulted in its customers receiving less than best execution.

106. As set forth in Lead Plaintiffs' certifications, Schwab executed a large number of trade orders for Lead Plaintiffs during the Class Period. ECF No. 27-1 (combined, Lead Plaintiffs had 722 Schwab transactions in 2011; 1,664 in 2012; 1,241 in 2013; 978 in 2014; and 611 in 2015). On information and belief, Lead Plaintiffs were damaged by Schwab's material omissions, in conjunction with its trade order routing practices that deprived them of the best execution of their orders.

107. While the Class members' damages are substantial, quantification would require discovery. According to the Class Period Account Agreements, "Information regarding the routing destination and time of execution of [customer] orders for ***up to a six-month period*** is also available upon request." ECF No. 49-7 at 248, 251, 254, 256. As explained below, Lead Plaintiffs and the Class would have been unable to discover that they were being harmed until after the second quarter of 2015. At that point, any information Schwab provided to its customers upon request regarding specific trades would have been well outside of the Class Period.

108. After Lead Plaintiffs discovered Schwab's wrongful actions, they sought to obtain information from Schwab concerning their trades and whether they obtained best executions. Schwab refused to provide any such information, claiming that its clients were only entitled to trade information during the six month period after the trade in question. Lead Plaintiffs had no reason to request such information at the time of their trades during the Class Period, and it is unreasonable to suggest that all investors are obligated to request full trade data about every trade they make on the off-hand possibility that the information will be necessary some time in the future. Further, to the extent that such information is in the exclusive control of other entities, such as UBS, Lead Plaintiffs have no access to such information at all, other than through Schwab in discovery.

109. In addition, only through a Court order directing Schwab to adhere to its best execution duties can future harm to its customers be avoided.

6. Plaintiff Posson Was Damaged by the Material Omissions

110. Fortunately, plaintiff Posson possesses data that lends itself to an analysis of how he was harmed by Schwab's failure of best execution. This analysis was conducted by comparing the little Schwab disclosed about his trades to market data. A description of three examples of ways in which plaintiff Posson was damaged is set forth herein.

Holding of an Order on a Dark Venue Resulting in Adverse Fill

111. On January 16, 2014, plaintiff Posson sent Schwab a limit order to buy 6,666 shares of Novavax, Inc. ("NVAX") at $6.08, when the NBB was $6.08 and the NBO was $6.09. This order was executed on a dark venue at $6.08. As explained below, the delay in filling the order cost Posson the opportunity to exit his position in advance of an adverse market movement.

112. The last NVAX trade on a lit venue (*i.e.*, a venue where quotes are viewable by the general public) at the higher tick price[22]—$6.08—was filled at 12:59:33.390 on Nasdaq. By the time that trade was publicly reported, the market bid had rolled down to $6.07.

[22] A tick is the minimum upward or downward movement in the price of a security.

113. Blocks of NVAX shares executed in 40 different fills totaling 8,897 shares before plaintiff Posson's order was executed, between 12:59:31.019 and 12:59:31.024. Plaintiff Posson's order was then filled in a single block of 6,666 shares at 12:59:31.026. Thereafter, between 12:59:31.027 and 12:59:33.390, an additional 1,623 shares executed on lit venues fully eliminated the market bid of $6.08. In other words, liquidity was executed on various venues in a market sweep event, yet plaintiff Posson's order was not executed until the bulk of shares had already been removed from the market. The dark venue—almost certainly UBS—held onto the order until the lit exchanges had been depleted of liquidity, then executed the order in unfavorable conditions resulting in an immediate one tick adverse price change, from $6.08 to $6.07.

114. The first trades executed at $6.08 had been taken place on EDGA, an inverted venue.[23] Had Schwab routed this order to EDGA, plaintiff Posson would have had additional time to exit his position at $6.08 and avoid the market sweep event. Instead, his order was routed to UBS, which held his trade until it was evident that the tick was about to roll down to a new NBBO of $6.07 bid and $6.08 ask, only then filling plaintiff Posson's order. If Schwab had routed plaintiff Posson's order to EDGA, an inverted venue where posted limit orders are typically the first to fill, Posson would have had time to re-sell at $6.08 and avoid a loss of $66.66. Instead, plaintiff Posson's order was held by UBS until adverse selection was imminent – *i.e.*, until it was clear that he would realize this loss.

115. Regardless of whether plaintiff Posson's order was marketable at the time of receipt, it is clear that the order was executed at a point in time when latency arbitrage opportunities existed for sophisticated off-exchange market makers. Order execution was delayed by this routing, and the order was likely potentially released for trading only when it was clear that the order could be traded against in an unfavorable sweep event, which resulted in an immediate swing against plaintiff Posson's interest.

[23] Inverted venues are venues that have inverted the "maker-taker model" by offering rebates to liquidity removers and charging fees to liquidity providers.

Delayed Fill and Adverse Selection of Order Sent to a High Rebate Exchange

116. On July 11, 2014, plaintiff Posson sent a nonmarketable limit order to buy 777 shares of Eldorado Gold Corporation, Inc. ("EGO") at $7.61. At 12:11:27.999, the order was posted on, and accepted by, EDGX. At this time, there were 20,100 shares of posted liquidity at a bid price of $7.61, and 39,900 shares of posted liquidity at an offer price of $7.62.

117. Between 12:11:29.198 and 12:11:29.199, a total of 500 EGO shares in five transactions were executed on three inverted venues (BATSY, BX, EDGA) at a price of $7.61.

118. Thereafter, between 12:11:29.233 and 12:11:31.640, an additional 6,750 shares in twenty transactions were executed on various venues, while Plaintiff's order went unfilled.

119. At 12:11:31.641, plaintiff Posson's order was executed in full on EDGX for 777 shares at a price of $7.61. At the time plaintiff Posson's execution was reported, the market bid had been reduced down to 200 shares of posted liquidity at $7.61 and the market ask had changed to a more aggressive price of $7.61 displaying 11,600 shares of posted liquidity, a condition known as a locked market.

120. The aggressive selling interest of 11,600 shares displayed a price of $7.61 that is coincident with the time of plaintiff Posson's execution is consistent with the use of intermarket sweep orders (that is, an order that executes against all posted liquidity at the NBBO and, possibly, certain liquidity outside the NBBO) and indicates that plaintiff Posson's order had been adversely filled in a market sweep event.

121. In fact, within two milliseconds of the execution of plaintiff Posson's order, at 12:11:31.643, the remainder of the liquidity at $7.61 was executed totaling 1,766 shares in seven transactions and the market was unlocked. At this time, the new market bid had rolled down to display 53,800 shares of posted liquidity at a price of $7.60 while the market ask had grown to display 28,000 shares of posted liquidity at $7.61. Ten seconds after plaintiff Posson's trade, the market had remained relatively stable, with 42,100 shares at a $7.60 bid and 22,000 shares at a $7.61 ask.

122. The decision to route plaintiff Posson's order to the back of the queue on EDGX resulted in other market participants being able to transact roughly two-thirds of the volume that

was executed at $7.61 before plaintiff Posson's order was given priority on EDGX and was accessed to the market.

123. In this instance, then, plaintiff Posson was denied the opportunity to post liquidity on inverted exchanges which were all accessed by liquidity seekers more than two seconds prior to the sweep event. If the market for EGO had not ticked downward in an adverse move, plaintiff Posson would have been denied the opportunity to execute most of his position at $7.61 because his order was posted to an exchange that charged take fees, instead of an inverted exchange.

124. Plaintiff Posson's order was only executed when the sweep event had filled all posted liquidity – *i.e.*, one or more sophisticated traders had seen that the market bid was rapidly collapsing and decided to sell shares at the posted bid price before the tick "rolled" one penny lower. The aggressive orders that swept the market against plaintiff Posson's limit price did so in a manner that resulted in a locked market consistent with the use of advanced day intermarket sweep orders. The market participants posting such aggressive orders knew full well that the price move would impact the market adversely for their counterparties. The aggressive sellers benefitted from adverse price movement to which Schwab detrimentally exposed plaintiff Posson's order through inferior routing practices, regardless of the adverse selection costs imposed on plaintiff Posson.

125. Had plaintiff Posson's order been routed to an inverted exchange, or even to an exchange that charged a lesser take fee, such as NYSE, where an additional 300 shares transacted at a price of $7.61 between 12:11:29.233 and 12:11:29.284, then plaintiff Posson would have had an additional two seconds to exit his position in advance of the pending market sweep event. Instead, because his order was resting on EDGX, it was filled *only when the market was locked*. Thus, where plaintiff Posson could have had time to sell the 777 shares that he would have acquired on the inverted exchanges at the locked market price, he was instead forced to realize the adverse impact of the $.01 downward tick resulting from the sweep event. Because plaintiff Posson's order was routed to EDGX (almost certainly by UBS) instead of an inverted venue, Posson therefore was denied the opportunity to sell his 777 and avoid a loss of $7.77.

126. Because of Schwab's self-interested practices, plaintiff Posson assumed outsized risk and realized disproportionately little reward. Plaintiff Posson was denied the opportunity to buy his shares more than two seconds earlier, which would have offered him protection against missed opportunities in the event of a favorable price move upward. Plaintiff Posson's order was only filled when it was clear that the collapsing market bid would result in an adverse price move that would roll over his posted bid price, and plaintiff Posson's upside was thus absorbed by the sweep order. Even though the limit order was filled at the posted price, plaintiff Posson was (i) given a far slower fill and (ii) left exposed to significant adverse selection, when an order routing strategy that was not self-interested would have sent plaintiff Posson's order to a superior venue where it would have been filled more quickly.

Adverse Selection of Order Sent to a High Rebate Exchange

127. On June 19, 2012 plaintiff Posson sent a nonmarketable limit order to sell 2,297 shares of Chesapeake Energy Corporation ("CHK") at $18.27. At 10:50:22.390, the order was posted on, and accepted by, EDGX. At this time, there were 3,400 shares of posted liquidity at a bid price of $18.26, and 19,600 shares of posted liquidity at an offer price of $18.27.

128. Between 10:51:43.761 and 10:51:43.780, a total of 1,052 of CHK shares in five transactions were executed with 952 shares executing on three inverted venues (BATSY, BX, EDGA) and 100 shares executing on NYSE, all at a price of $18.27.

129. Thereafter, between 10:51:43.854 and 10:51:43.855, an additional 9,218 shares in five transactions executed on NASDAQ, NYSE, and NYSE ARCA.

130. Plaintiff Posson's order went unfilled until after these transactions, until 400 shares of his order executed at 10:51:43.860 and 1,897 shares of his executed at 10:51:43.860, both on EDGX. By the time the EDGX transactions were reported all the selling interest at the price of $18.27 had been eliminated and the market bid had ticked up to $18.27, with a market offer price of $18.28.

131. At the times of plaintiff Posson's two transactions, the posted liquidity at the new bid of $18.27 increased from 2,800 shares to 11,600 shares, indicating the presence of one or more aggressive buyers sweeping out the previous offer of $18.27 and setting new aggressive prices at a

market bid of $18.27. Shortly thereafter, at 10:51:43.891, the market bid size increased further to 23,300 shares bid at $18.27. Ten seconds after plaintiff Posson's trade, the market had continued to move adversely against his trade, with 6,400 shares of liquidity posted at a bid of $18.29 and 22,500 shares of liquidity posted at an ask of $18.30.

132. The decision to route plaintiff Posson's order to the back-of-queue on EDGX resulted in other market participants being able to transact over 80% of the volume that was executed at $18.27 before plaintiff Posson's order was executed.

133. In this instance, plaintiff Posson was denied the opportunity to post liquidity on inverted exchanges which were all accessed by liquidity seekers prior to their accessing EDGX. If the market for CHK had not ticked upward in an adverse move, plaintiff Posson would have been denied the opportunity to execute against the liquidity seekers that preferred the inverted venues to other venues because his order was posted to an exchange that charged take fees, instead of an inverted exchange.

134. Plaintiff Posson's order only executed when the sweep event had filled all posted liquidity and literally resulted in the last two transactions reported at a price of $18.27 before the market adversely ticked upward – *i.e.*, one or more sophisticated traders had seen that the market ask was rapidly collapsing and decided to buy shares at the posted offer price before the tick "rolled" one penny higher. The aggressive buyers benefitted from adverse price movement to which plaintiff Posson's order was detrimentally exposed through inferior routing practices, regardless of the adverse selection costs imposed on Plaintiff.

135. Had plaintiff Posson's order been routed to an inverted exchange, or even to an exchange that charged a lesser take fee, such as NYSE, then plaintiff Posson would have had the opportunity to exit his sell position in advance of the pending market sweep event that drove the market upwards. Instead, plaintiff Posson's order was the very last to fill before the tick rolled, denying him any opportunity to reassert a bid and realize the upside of the swing. Thus, where plaintiff Posson could have had time to repurchase the 2,297 shares that he would have sold on the inverted exchanges had his order been routed there, he was instead forced to realize the adverse impact of the $.01 upward tick resulting from the sweep event. Because plaintiff Posson's order

was routed to EDGX (almost certainly by UBS) instead of an inverted venue, Posson therefore was denied the opportunity to repurchase his 2,297 shares and avoid a loss of $22.97.

136. Because of Schwab's self-interested practices, plaintiff Posson's order was only filled when it was clear that the collapsing market ask would result in an adverse price move that would roll over his posted offer price, and plaintiff Posson's upside was thus absorbed by the adverse price tick. Even though the limit order was filled at the posted price, plaintiff Posson was (i) given a far slower fill and (ii) left exposed to significant adverse selection, when an order routing strategy that was not self-interested would have sent plaintiff Posson's order to a superior venue where it would have been filled more quickly.

VI. INAPPLICABILITY OF THE STATUTORY SAFE HARBOR AND BESPEAKS CAUTION DOCTRINE

137. The statutory safe harbor and the bespeaks caution doctrine applicable to forward-looking statements under the Private Securities Litigation Reform Act of 1995 do not apply to the omissions alleged in this Complaint.

138. None of Defendants' omissions related to a forward-looking statement because none was an assumption underlying or relating to any plan, projection, or statement of future economic performance, as they were not stated to be such assumptions underlying or relating to any projection or statement of future economic performance when made, nor were any of the projections or forecasts made by Defendants expressly related to, or stated to be dependent on, those historic or present-tense statements when made.

VII. STATUTE OF LIMITATIONS

139. For claims brought under Section 10(b) of the Exchange Act, the applicable statute of limitations is two years. 28 U.S.C. § 1658(b). The limitations periods begins to run when the plaintiff has discovered, or in the exercise of reasonable diligence could have discovered, the facts that constitute the violation.

140. Before and throughout the Class Period, Schwab acknowledged that it received order routing payments, but at the same time, Schwab omitted the material facts set forth above related to its duty of best execution.

141. Period reports that Schwab filed with the SEC disclosed the percentage of Schwab's orders that were being routed to UBS, but these reports provided an incomplete picture and did not reveal that Schwab's customers were being harmed. For example, Schwab's customers could not even begin to learn about the inferior execution quality they were receiving until after the first quarter of 2015, with the disclosure of the FIF statistics. These disclosures finally allowed price improvement comparisons with competing brokers, such as Fidelity, that did not accept PFOF. Further, the Battalio paper which empirically demonstrated that "the decision of some national brokerages to route all nonmarketable limit orders to a single exchange paying the highest rebate is not consistent with the broker's responsibility to obtain best execution" was published on March 31, 2015. *Supra* at note 17. And the CFA Institute study, which empirically demonstrated that the United Kingdom's banning of order routing payments resulted in improved execution, was published in August 2016. *Supra* at note 16.

142. Further, a putative class action concerning substantially the same facts, events, statements, transactions, defendants, and class members that are at issue in this action, *Louis Lim v. Charles Schwab & Co., Inc., et al.*, No. 3:15 Civ. 02074, was commenced in the U.S. District Court for the Northern District of California on May 8, 2015 (the "Lim Action"). The Lim Action, along with a related action, were dismissed on January 6, 2016. Pursuant to *American Pipe & Construction Co. v. Utah*, 414 U.S. 538 (1974), the statute of limitations was tolled during the eight-month period of the Lim Action.

VIII. CLASS ACTION ALLEGATIONS

143. Lead Plaintiffs and plaintiff Posson bring this action as a class action pursuant to Rules 23(a) and (b)(2) and/or (b)(3) of the Federal Rules of Civil Procedure for the purpose of asserting the claims alleged in this Complaint on a common basis. Lead Plaintiffs and plaintiff Posson bring this action on behalf of themselves and all members of the following class:

> All clients of Schwab between July 13, 2011 and December 31, 2014 who placed orders that were routed to UBS by Schwab pursuant to the Equities Order Handling Agreement. Excluded from the Class are the officers, directors, and employees of Schwab.

144. Lead Plaintiffs and plaintiff Posson reserve the right to modify or amend the Class definition after discovery.

145. *Numerosity. Rule 23(a)(1).* The members of the Class are so numerous that their individual joinder is impracticable. Schwab has over 9.8 million active brokerage accounts. Lead Plaintiffs and plaintiff Posson are informed and believe that the proposed Class contains at least hundreds of thousands of Defendants' clients who have been damaged by Schwab's conduct as alleged herein. Schwab retail brokerage account holders and other members of the Class may be identified from records maintained by Schwab and may be notified of the pendency of this action by mail, using the form of notice similar to that customarily used in securities class actions.

146. *Existence of Common Questions of Law and Fact. Rule 23(a)(2).* This action involves common questions of law and fact, which include, but are not limited to, the following:

a. Whether the statements made by Defendants as part of their promises to provide, and assertions that they do provide, best execution of their clients' orders after considering proper execution quality metrics, discussed herein omitted the material facts described above that made the statements misleading;

b. Whether Defendants omitted the material facts with the requisite scienter;

c. Whether Defendants' omissions violated the federal securities laws;

d. Whether Lead Plaintiffs, plaintiff Posson, and the Class are entitled to damages; and

e. Whether Lead Plaintiffs, plaintiff Posson, and the Class are entitled to injunctive relief, restitution, other equitable relief, and/or other relief as may be proper.

147. *Typicality. Rule 23(a)(3).* All members of the Class have been subject to and affected by the same omissions by Defendants. The claims alleged herein are based on the same violations by Defendants that harmed Lead Plaintiffs, plaintiff Posson, and the Class. By omitting material facts as to Defendants' execution of their duty of best execution, all members of the Class were subjected to the same wrongful conduct. Lead Plaintiffs' and plaintiff Posson's claims are typical of the Class's claims and do not conflict with the interests of any other Class members. Defendants' unlawful, unfair, deceptive, and/or fraudulent actions and omissions of material facts

as to Defendants' duty of best execution concern the same business practices described herein irrespective of where they occurred or were experienced.

148. *Adequacy. Rule 23(a)(4).* Lead Plaintiffs and plaintiff Posson will fairly and adequately protect the interests of the Class. Lead Plaintiffs and plaintiff Posson have retained counsel experienced in complex class action litigation, and intend to prosecute this action vigorously. Lead Plaintiffs and plaintiff Posson have no interests adverse or antagonistic to the Class.

149. *Injunctive and Declaratory Relief. Rule 23(b)(2).* Defendants' omissions relating to its routing of client orders are uniform as to members of the Class. Defendants have refused to act on grounds that apply generally to the Class, such that final injunctive relief as requested herein is appropriate respecting the Class as a whole.

150. *Predominance and Superiority of Class Action. Rule 23(b)(3).* Questions of law or fact common to the Class predominate over any questions affecting only individual members and a class action is superior to other methods for the fast and efficient adjudication of this controversy, for at least the following reasons:

a. Absent a class action, members of the Class as a practical matter will be unable to obtain redress. Defendants' violations of their legal obligations will continue without remedy, additional clients will be harmed, and Defendants will continue to retain their ill-gotten gains;

b. It would be a substantial hardship for most members of the Class if they were forced to prosecute individual actions;

c. When the liability of Defendants has been adjudicated, the Court will be able to determine the claims of all members of the Class;

d. A class action will permit an orderly and expeditious administration of each Class member's claim and foster economies of time, effort, and expense;

e. A class action regarding the issues in this case does not create any problems of manageability;

f. Defendants have failed to act on grounds generally applicable to the members of the Class, making class-wide monetary relief appropriate; and

g. As a result of Defendants' omissions of fact as to its order routing policy, each member of the Class suffered damages to an extent within the peculiar knowledge of the Defendants.

151. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Further, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it impossible for Class members to individually redress the wrongs done to them. There will be no difficulty in management of this action as a class action.

IX. CLAIM FOR RELIEF

Violation of Section 10(b) of the Exchange Act and Rule 10b-5 Promulgated Thereunder (Against All Defendants)

152. Lead Plaintiffs and plaintiff Posson repeat and reallege each allegation contained in the above paragraphs as if fully set forth herein.

153. This Count is asserted against the Defendants and is based upon Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and Rule 10b-5 promulgated thereunder by the SEC.

154. During the Class Period, Defendants engaged in a plan, scheme, conspiracy, and course of conduct, pursuant to which they knowingly or recklessly engaged in acts, transactions, practices, and courses of conduct which operated as a fraud and deceit upon Lead Plaintiffs, plaintiff Posson, and the Class; made various statements omitting to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and employed devices, schemes, and artifices to defraud in connection with the purchase and sale of securities.

155. Such scheme was intended to, and, throughout the Class Period, did: (i) deceive Lead Plaintiffs, plaintiff Posson and the Class, as alleged herein; (ii) cause Class members to engage in a broker-client relationship with Defendants which they otherwise would not have done; (iii) cause Class members to place orders with Defendants which they otherwise would not have

placed; and (iv) deprive Class members of the best execution of their orders. Further, Defendants knew that by failing in their duty of best execution, each member of the Class would, and did, incur economic harm arising from their orders being routed to almost exclusively one venue. In furtherance of this unlawful scheme, plan, and course of conduct, the Defendants' senior managers failed to take the actions set forth herein.

156. Pursuant to the above plan, scheme, conspiracy, and course of conduct, Defendants participated directly or indirectly in the preparation and/or issuance of public statements and documents described above, including statements on Schwab's website and statements made to the government and the media, that were designed to convince the public, in general, and Defendants' clients, in particular, that Schwab was routing its clients' orders upon consideration of proper execution quality metrics when, in fact, Schwab omitted material facts that indicated that it was in fact prioritizing the Handling Agreement. Such statements and documents were materially false and misleading in that they failed to disclose material information concerning Schwab's order routing practices.

157. Defendants' had actual knowledge of the material omissions alleged herein and intended thereby to deceive Lead Plaintiffs, plaintiff Posson and the Class, or, in the alternative, Defendants acted with reckless disregard for the truth in that they failed or refused to ascertain and disclose such facts as would reveal the materially misleading nature of the statements made, although such facts were readily available to them. Said omissions were committed willfully or with reckless disregard for the truth.

158. Defendants are liable both directly and indirectly for the wrongs complained of herein. Defendants had a duty to disseminate timely, accurate, and truthful information with respect to Schwab's routing of its clients' orders. As a result of the dissemination of the aforementioned public statements and documents, Lead Plaintiffs, plaintiff Posson, and the Class placed orders through Schwab with an expectation of best execution throughout the Class Period. In ignorance of the adverse facts concerning Defendants' failure to provide best execution, which were concealed by Defendants, and in reliance on Defendants' materially misleading statements and omissions alleged herein, Lead Plaintiffs, plaintiff Posson, and the Class placed orders

through Schwab and were damaged thereby. By reason of the conduct alleged herein, Defendants, knowingly or with deliberate recklessness, violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder.

159. As a direct and proximate result of the Defendants' wrongful conduct, Lead Plaintiffs, plaintiff Posson, and the Class suffered damages in connection with Defendants' routing of their orders during the Class Period.

X. PRAYER FOR RELIEF

WHEREFORE, Lead Plaintiffs and plaintiff Posson, on behalf of themselves and the Class, request entry of an order as follows:

A. Declaring this action to be a class action properly maintained pursuant to Rule 23 of the Federal Rules of Civil Procedure, certifying the Class with Lead Plaintiffs and plaintiff Posson as Class Representatives and Lead Plaintiffs' Counsel as Class Counsel, with plaintiff Posson's counsel as of counsel to Class Counsel;

B. Awarding Lead Plaintiffs, plaintiff Posson, and the Class damages and interest thereon;

C. Directing Schwab to take all necessary actions to reform and improve its internal procedures to protect Schwab's clients from recurrences of the damaging events described herein;

D. Awarding Lead Plaintiffs and plaintiff Posson the costs and disbursements of this action, including reasonable allowance of fees and costs for their attorneys, experts, and accountants; and

E. Granting Lead Plaintiffs and plaintiff Posson such other and further relief as the Court may deem just and proper under the circumstances.

XI. JURY DEMAND

Lead Plaintiffs and plaintiff Posson demand a trial by jury.

DATED: August 14, 2017

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PROOF OF SERVICE BY ELECTRONIC POSTING

I, the undersigned say:

I am not a party to the above case, and am over eighteen years old. On August 14, 2017, I served true and correct copies of the foregoing document, by posting the document electronically to the ECF website of the United States District Court for the Northern District of California, for receipt electronically by the parties listed on the Court's Service List.

I affirm under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on August 14, 2017, at Los Angeles, California.

s/ Joshua L. Crowell
Joshua L. Crowell

Mailing Information for a Case 3:16-cv-03938-RS Crago v. Charles Schwab & Co., Inc. et al

Electronic Mail Notice List

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